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Vol 19, No. 5.

KANTOROVICH, L. V. and KRYLOV, V. I. ID NUMBER 941590

Priblizhennye metody vysshego analiza. 3d ed. Moscow, 1950. 695p.

Book dealing with mathematical physics, approximation of integral equations, variational methods, and other mathematical approximations; published as a Govt. Technical-Theoretical Literature Edition.

KANTOROVICH, Leonid Vital'evich

Calculation of efficient cutting of industrial materials Leningrad  
Leningradshoe gazetno-zhurnal'noe i knizhnoe izd-vo, 1951.

197 p. (52-40222) TA183.K33

KANTOROVICH, L.V.

188755

Uspekh Mathematics - Modern Algebra, May/Jun 51  
Semi-Ordered Groups and Spaces

"Semi-Ordered Groups and Linear Semi-Ordered Spaces," L. V. Kantorovich, B. Z. Vulikh, A. G. Pinsker

"Uspekh Matemat Nauk" Vol VI, No 3 (43), pp 31-98

Considers K-groups, their definition and properties; convergence to K-groups; expansion of K-groups into components; widening of K-groups into spaces and K-linears; immersion of K-group into K-space; integral representation of elements of K-space with unity; construction of continuous functions in K-spaces, and multiplication of

188755

Uspekh Mathematics - Modern Algebra, May/Jun 51  
Semi-Ordered Groups and Spaces (Contd)

elements; regular K-spaces and K-groups; normed K-spaces; regular operators in K-groups and K-spaces; linear operators; completely linear functionals; conjugate spaces; extension of operators; sequences of operators, and ergodic theorems; integral representation of operators; application to functional eqs; representation of K-spaces by means of continuous functions; representation of K-spaces by means of measurable functions. Finally considers certain problems. Cites extensive literature.

188755

Mathematics - Nonlinear Equations, 21 Oct 51  
Functional  
Majorants

Certain Further Applications of the Principle of  
Majorants, "L. V. Kantorovich, Moscow Branch of  
Math Inst Imeni Steklov, Acad Sci USSR

Math Inst Imeni Steklov, No 6, pp 849-852

"Dokl Ak Nauk SSSR" Vol LXXX, No 6, pp 849-852,

In a recent article ("Dokl Ak Nauk SSSR" 76, 17,  
1951) the author indicated the possibility of  
employing the principle of majorants for establish-  
ing the existence of the solution of nonlinear  
functional eqs and the convergence of successive  
217769

approximations, Newton's process in particular.

In current article the author gives further  
applications of this method, particularly its  
utilization in establishing the uniqueness of solu-  
tion and in investigating eqs that depend upon a para-  
meter. Submitted 27 Jul 51 by Acad V. I. Smirnov.

217769

KANTOROVICH, L. V.

PHASE I BOOK EXPLOITATION 1007

Kantorovich, Leonid Vital'evich and Krylov, Vladimir Ivanovich

Priblizhennyye metody vysshego analiza (Approximation Methods of Higher Analysis) 4th ed. Moscow, Gostekhizdat, 1952. 695 p. 25,000 copies printed.

Ed.: Akilov, G.P.; Tech. Ed.: Volchok, K.M.

PURPOSE: This book is intended for scientific workers in mathematical physics, mechanics and other applied sciences.

COVERAGE: The book is a systematic presentation of the approximate solution of problems of mathematical physics, mechanics and other applied sciences. It includes methods of representing the solution of a problem in the form of infinite series, relaxation methods and variational methods. A large part of the book is devoted to problems of conformal mapping and their application in the solution of fundamental problems of mathematical physics and other applied sciences. Methods of approximate solution of an

Card 1/17

Approximation Methods of Higher Analysis 1007

integral equation of the Fredholm type and the application of integral equations to the solution of the Dirichlet problem are studied. Many illustrative examples are given. Chapters 1, 2 and 4 were written by L.V.Kantorovich, Chapters 3, 6, 7 and part of Chapter 5 were written by V.I.Krylov, and section 10 of Chapter 5 was written by N.P.Stenin. There are no references.

TABLE OF CONTENTS:

Preface to Third Edition	8
Preface to Second Edition	10
Ch. I. Methods Based on the Representation of a Solution in the Form of an Infinite Series	
1. Fourier method	
1. Dirichlet problem for a rectangular region	11
2. Dirichlet and Neumann problems for a ring region in the case of a Laplace equation	23
3. Example of the biharmonic problem	27

Card 2/17

KANTOROVICH, Leonid Vital'yevich; KRYLOV, Vladimir Ivanovich; CHERNIN, Kalman Ieremeyevich; AKILOV, G.P., redaktor; VOLCHOK, K.M. tekhnicheskiiy redaktor.

[Tables for the numerical solution of boundary problems in the theory of harmonic functions] Tablitsy dlia chislennogo resheniya granichnykh zadach teorii garmonicheskikh funktsii. Moskva, Gos.isd-vo tekhniko-teoret.lit-ry, 1956. 462 p.

(Harmonic functions)

(MLRA 10:6)

KANTOROVICH, L.V.

SUBJECT USSR/MATHEMATICS/Functional analysis  
AUTHOR KANTOROVICH L.V. CARD 1/1 PG - 474  
TITLE On integral operators.  
PERIODICAL Uspechi mat.Nauk 11, 2, 3-29 (1956)  
reviewed 1/1957

The author proved some theorems on integral operators. The theorems are generalizations of those assertions on integrals of potential type which Sobolev has used for the proof of his "imbedding theorems" (Mat.Sbornik, n. Ser. 2, fasc.3, (1937)). The obtained theorems on integral operators are used in order to prove Sobolev's inequation and the mentioned imbedding theorems.



KANTOROVICH, L.V.; FADDEYEV, D.K.

Isidor Pavlovich Matanson; on the occasion of the 50th anniversary of his birth. Usp.mat.nauk 11 no.4:193-196 J1-Ag '56.  
(Matanson, Isidor Pavlovich, 1906-) (MLRA 9:11)  
(Bibliography--Mathematics)

KALITOROVICH, L.V.

Procedure for numerical and analytic calculations on programming  
computers. Izv.AN Arm.SSR.Ser.fis.-mat.nauk 10 no.2: 3-16 '57.  
(MLRA 10:8)

1.Leningradskoye otdeleniye Matematicheskogo instituta AN SSSR.  
(Electronic calculating machines) (Linear programming)

KANTOROVICH, L.V.

Some further applications of Newton's approximation method to  
functional equations (with summary in English). Vest. LGU 12  
no.7:68-103 '57. (MLA 10:6)  
(Functional equations) (Approximate computation)

**AUTHOR:**  
**TITLE:**

KANTOROVICH, L. V.

PA - 3034

**PERIODICAL:**

On a Mathematical Symbolism which is Convenient for Carrying out Computations by Means of Machines. (Ob odnoy matematicheskoy simbole, udobnoy pri provedenii vychisleniy na mashinakh, Russian) Doklady Akademii Nauk SSSR. 1957, Vol 113, Nr 4, pp 738-741 (U.S.S.R.)  
Received: 6 / 1957  
Reviewed: 7 / 1957

**ABSTRACT:**

It is necessary to develop practical, convenient, and universal methods for the introduction of numerical, analytical, logical and also other problems into electronic computers. Also uniform methods are needed for carrying out these computations. For this purpose the following three problems have to be developed: 1.) Introduction of a uniform symbolism. Such a symbolism has to be universal, exact, unequivocal, compact and easy to use in machines. 2.) Development of convenient forms of writing on the material to be used in the machine. 3.) Development of uniform methods for the working out of the mathematical problem without taking account of its concrete contents. Schemata: The various (finitely numerous) mathematical objects are described independently of their nature (numbers, vectors, functions, operators, etc.) with whole numbers. As a basic form for the recording of a certain mathematical specification an abstract scheme is selected which defines the relations between the individual objects. The operators are best included within a number of elements of the "field" of the objects. The notion of an "explicit" scheme is defined,

Card 1/2

On a Mathematical Symbolism which is Convenient for Carrying out  
Computations by Means of Machines. PA - 3031

as well as that of the "solution of the scheme". The elements of an  
explicit scheme are transformed in a natural manner into a partly  
ordered quantity. Further details are discussed.

Simplifications and Transformations of the Scheme: The author dis-  
cusses some concrete operations connected with the treatment of ab-  
stract schemes.

Analytical Transformations: The programs of the general transformations  
of the schemes can be used for various analytical computations carried  
out by means of computers.

Computations: A universal program for the computation of the values  
of an explicit scheme can be constructed within a certain program.  
Various fields of application for this general computing process are  
described. (No Illustrations).

Leningrad Department of the Mathematical Institute "V.A. STEKLOV"  
L.S. SOBOLEV  
24.9.1956  
Library of Congress

ASSOCIATION:  
PRESENTED BY:  
SUBMITTED:  
AVAILABLE:

Card 2/2

AUTHOR:

Kantorovich, L.V.

20-3-4/59

TITLE:

On the Methods for Analyzing Some Extreme Problems of Production Schedules. (O metodakh analiza nekotorykh ekstremal'nykh planovo-proizvodstvennykh zadach)

PERIODICAL:

Doklady Akad.Nauk SSSR, 1957, Vol. 115, Nr 3, pp. 441-444 (USSR)

ABSTRACT:

The methods of analyzing the mathematical models of the corresponding problems are of essential use to the investigation of problems connected with the establishment of a rational plan for the best utilization of the resources and for the maximum output of production. One may have 1 sort of final products, m sorts of intermediate products and n sorts of production factors. One may further have N technological manufacturing processes. Any of these processes  $\pi_s (s = 1, \dots, N)$  is characterized by the three vectors  $X^{(s)} (x_1^{(s)}, \dots, x_1^{(s)})$ ,  $Y^{(s)} (y_1^{(s)}, \dots, y_m^{(s)})$ ,  $Z^{(s)} (z_1^{(s)}, \dots, z_n^{(s)})$

The components of these vectors indicate the production volume of the final products, of the intermediate products or of the manufacturing factors. The admissible plans are defined as positive linear combinations of the main processes, i.e. the plan P is defined by the vector  $P(p_1, \dots, p_N)$ . The plan shall be determined under the following conditions. 1) The expenditure of production factors is limited by a certain vector given here. 2) No consumption of

Card 1/2

On the Methods for Analyzing Some Extreme Problems of Production Schedules. 20-3-4/59

intermediate products takes place. 3) The volume of the final production shall reach a maximum under consideration of an assumed assortment. A corresponding theorem and some consequences following from it are given. Various methods based on the use of "solving factors" can be used for the effective solution of problems of the construction of an optimum plan. These methods then furnish the characteristic of the optimum plan. For the simultaneous determination of the optimum plan and the system of the factors various processes of successive approximation can be used: 1) Successive improvement of the plan, 2) approximation by conditionally optimum plans. 3) Approximation to the system of the factors and to the plan by the introduction of bilateral limits for the value of the factors. There are 7 references, 5 of which are Slavic.

ASSOCIATION: Leningrad Branch of the Mathematical Institute AN USSR imeni V.A.Steklov. (Leningradskoye otdeleniye Matematicheskogo instituta imeni V.A.Steklova AN SSSR)  
PRESENTED: March 5, 1957, by Kolmogorov, A.N., Academician.  
SUBMITTED: March 4, 1957  
AVAILABLE: Library of Congress.

Card 2/2

*APPROVED FOR RELEASE, L.V.*

AUTHOR: KANTOROVICH, L.V., RUBINSHEYN, G.Sh.

20-6-2/48

TITLE: On a Function Space and Some Extremal Problems (Ob odnom funktsional'nom prostranstve i nekotorykh ekstremal'nykh zadachakh)

PERIODICAL: Doklady Akad.Nauk. SSSR, 1957, Vol. 115, Nr. 6, pp.1058-1061 (USSR)

ABSTRACT: The authors consider the linear normalized space  $\Phi(B)$  of the completely additive functions being defined on the family B of Borel's sets of an arbitrary metrical compactum R. In deviation of the usual norm the authors introduce a norm which essentially uses the metric of R. Here it is stated that the space conjugated to  $\Phi(B)$  consists of the functions defined on R, and satisfying the Lipschitz condition Lip'. With the aid of the introduced space several extremal problems are solved. The considered problems (displacement of masses, plan of operation) are already treated several times by Kantorovich [Ref 2, 3, 5].

ASSOCIATION: Leningrad Br. of the Math. Inst. im. V.A. Steklov, AN USSR (Leningradskoye otdeleniye matematicheskogo instituta im. V.A. Steklova A.N. SSSR,

SUBMITTED: March 26, 1957

AVAILABLE: Library of Congress

CARD 1/1



*Kantorovich, L.V.*

AUTHOR: A.B. (only initials given)

2-58-3-15/17

TITLE: In the Statistical Section of the Moscow House of Scientists of the USSR Academy of Sciences (V statisticheskoy seksii Moskovskogo doma uchënykh Akademii nauk SSSR)

PERIODICAL: Vestnik Statistiki, 1958, Nr 3, pp 87-88 (USSR)

ABSTRACT: The article is a report on a paper entitled "Linear Programming - a New Method of Finding the Optimal Solution of Economic Problems", read in January 1958 to the section by Ya.P. Gerchuk. The purpose and method of linear programming are briefly described and the claim is made that the mathematical method of determining the optimum allocation of economic resources now known as "linear programming" was first proposed in 1939 by the Leningrad mathematician, Professor L.V. Kantorovich, who published a pamphlet on it through the Leningrad University entitled "Mathematical Methods of Organizing and Planning Production".

Card 1/1

Klimov, A.N.

23(5)

FROM: BOOK EXPLOITATION 804/1392

Leningrad. Leningradskoe ekonomicheskoye institut

Organizatsiya i planirovaniye razvremennoy raboty mashinostroitel'nykh predpriyatiy; Mashinostroyeniye sovetskoyey. Sbornik (Organization and Planning of Uniform Work in Machine-building Enterprises) Conference of Vsesoy. Sbornik (Moscow, 1958. 48 p. (Series: [12] Trudy, vyy. 82) 4,000 copies printed.

Eds.: S.A. Vukhov, and E.G. Zharovskiy. Tech. Ed.: L.V. Shkolovskiy; Managing Ed. for Literature on Machine-building Technology (Moscow): Ye.P. Kuznetsov, Engineer.

FROM: This collection of articles is intended for engineering and technical personnel in machine-building establishments, and for scientific workers and students of institutes and departments of engineering and economics.

CONTENTS: This collection of articles contains reports by workers from various scientific research institutes, and industrial establishments presented at the conference of Vsesoy. Sbornik on the subject: "Organization and Planning of Uniform Operations in Machine-building Establishments." These reports discuss general problems encountered in organization, analysis, and theory of uniform production, as well as problems in schedule planning, technical preparation, and production specialization.

Card 1/8

Shkolovskiy, L.V., Professor, Doctor of Physical and Mathematical Sciences (Leningradskoye ekonomicheskoye institut AN SSSR [Leningrad Branch of the Mathematical Institute of the AN USSR]). Possibilities of Applying Mathematical Methods in Production-planning Problems

338

KARPOVICH, L.V.

"Mathematical Methods in Economic Planning Tasks" (10 May 1957)

paper presented at the Seminars on Cybernetics at Moscow University during the 1956-57 school year.

Problemy Kibernetiki, No. 1, 1958

AUTHOR: KANTOROVICH, L.V., NATANSON, I.P. 43-7-1/18

TITLE: Grigoriy Mikhaylovich Fikhtengol'ts (on his 70th birthday)  
(Grigoriy Mikhaylovich Fikhtengol'ts (a semideryatiletuyu so  
dnya rozhdeniya))

PERIODICAL: Vestnik Leningradskogo Universiteta, Seriya Matematiki, Mekhaniki  
i Astronomii, 1958, Nr 7 (2), pp 5-13 (USSR)

ABSTRACT: This paper consists of seven sections. 1. Short career of life  
of Fikhtengol'ts, born 1888; 2. his papers on real functions  
being representable as integrals with a parameter; 3. his papers  
on the superposition of absolutely continuous real functions,  
on extremal values of continuous and additive set functions and  
on the closedness and completeness of function systems; 4. his  
papers on the representability of harmonic and holomorphic  
functions, respectively, by Poisson-Stieltjes and Cauchy integrals  
respectively; 5. his papers on functional analysis; 6. his book  
of higher analysis (3 volumes - 2500 pages) and other books;  
7.8.9. his pedagogic, organizing and public activity.  
The paper contains a photo of Fikhtengol'ts and a list of  
publications of 39 papers, 21 of which are Slavic.

AVAILABLE: Library of Congress  
Card 1/1 1. Biography 2. Mathematics 3. Functions-Theory

AUTHOR: ~~KANTOROVICH, I. V.~~, RUBINSHTEYN, G. Sh. 43-7-7/18  
TITLE: On a Space of Completely Additive Functions (Ob odnom  
prostranstve vpolne additivnykh funktsiy)  
PERIODICAL: Vestnik Leningradskogo Universiteta, Seriya Matematiki, Mekhaniki  
i Astronomii, 1958, Nr 7 (2), pp 52-59 (USSR)  
ABSTRACT: The present paper contains the proofs for the results announced  
recently by the authors [Ref.3]. The definition of the norm  
deviating from the usual manner was already proposed by  
Kantorovich [Ref.4] in 1942 for the investigation of displace-  
ments of masses and seems to be very suitable for special  
problems of applications.  
6 Soviet and 2 foreign references are quoted.  
SUBMITTED: 27 January 1958  
AVAILABLE: Library of Congress  
Card 1/1 1. Functions-Theory 2. Functions-Applications

KANTOROVICH, Leonid Vital'yevich; NEMCHINOV, V.S., akademik, otv.red.;  
OSTINOV, N.A., red.; SHEVCHENKO, G.M., tekhn.red.

[Linear programming for the best utilisation of resources]  
Ekonomicheskii raschet (nailuchshego ispol'zovaniia resursov.)  
Moskva, Izd-vo Akad.nauk SSSR, 1959. 343 p. (MIRA 12:11)

1. Chlen-korrespondent AN SSSR (for Kantorovich).  
(Linear programming)

16(1)

PHASE I BOOK EXPLOITATION

SOV/3044

Kantorovich, Leonid Vital'yevich, and Gleb Pavlovich Akilov

Funktsional'nyy analiz v normirovannykh prostranstvakh (Functional Analysis in Normed Spaces) Moscow, Fizmatgiz, 1959. 684 p. 6,000 copies printed.

Ed.: B. M. Makarov; Tech. Ed.: R. G. Pol'skaya.

PURPOSE: This book is intended for students specializing in mathematical analysis and computer mathematics.

COVERAGE: The book treats the theory of normed spaces, the theory of operations, and the theory of functional equations. Linear as well as non-linear operations and equations are discussed. In addition to the general theory, particular functional spaces and operations are considered. In particular, the spaces of differentiable functions of many variables, introduced by S. L. Sobolev, are treated. The Hilbert space and the theory of operators in it are considered as a part of the theory of Banach spaces. Of the other approaches to functional analysis, only

Card ~~1/8~~

Functional Analysis (Cont.)

SOV/3044

the theory of linear topological spaces is treated in this book (Ch. XI). In the treatment of functional analysis, particular attention is given to its use in applied analysis for the construction and investigation of approximate methods (Ch. XIV). The authors thank B. M. Makarov, A. N. Baluyev, A. M. Vershik, M. K. Gavurin, I. K. Daugovet, V. P. Il'in, B. A. Samokish, V. N. Sudakov, L. V. Florinskaya, and V. P. Khavin. Standard reference works in functional analysis are listed. There are 145 references: 66 Russian, 35 English, 26 German, 15 French, 2 Italian, and 1 Polish.

TABLE OF CONTENTS:

Foreword

7

PART I. LINEAR OPERATIONS AND FUNCTIONALS

Ch. I. Metric Spaces

1. Basic concepts

11

2. Completeness and separability

18

Card ~~28~~



KANTOROVICH, L.V.

16(0) PHASE I BOOK EXPLOITATION 307/3177  
Matematika v SSSR za srok let, 1917-1957, tom 1: Osnovnye stat'i (Mathematics in the USSR for Forty Years, 1917-1957) Vol. 1: Main Articles) Moscow, Fizmatgiz, 1959. 1002 p. 5,500 copies printed.

Red: A. G. Kurash, (Chief Ed.), V. I. Nititskov, V. G. Matyushev, Ye. B. Dytkin, G. Ye. Shilova, and A. P. Yushkevich; Ed. (Inside book): A. P. Lapov, Tech. Ed.: S. M. Ansharov.

PURPOSE: This book is intended for mathematicians and historians of mathematics interested in Soviet contributions to the field.

COVERAGE: This book is Volume I of a major 2-volume work on the history of Soviet mathematics. Volume I surveys the chief contributions made by Soviet mathematicians during the period 1917-1957; Volume II will contain a bibliography of major works since 1957 and biographic sketches of some of the leading mathematicians. This work follows the tradition set by two earlier works: Matematika v SSSR za pyatnadtsat' let (Mathematics in the USSR for 15 Years) and Matematika v SSSR za tridtsat' let (Mathematics in the USSR for 30 Years). The book is divided into the main divisions of the field, i.e., algebra, topology, theory of probability, functional analysis, etc., and contributions and outstanding problems in each discussed. A listing of some 1400 Soviet mathematicians is included with references to their contributions in the field.

Algebra, I. I., and S. V. Gusevskii, Mathematical Statistics 797  
Gavurin, M. K., and L. V. Kantorovich, Approximation and Numerical Methods 809

# Introduction

1. Iterative methods of solving linear problems	809
2. Gradient methods	812
3. Variational methods	814
4. Methods of moments	817
5. General theories of approximation methods	820
6. Methods of solving systems of linear problems	822
7. Theory of approximations	823
8. Mechanical quadratures	827
9. Problems of linear algebra	830
10. Integral equations	833
11. Ordinary differential equations	837
12. Difference methods for partial differential equations	841
13. Approximation methods of conformal mappings	846
14. Mathematical programming-problems and linear programming	848
15. Tables	850

ALEKSANDROV, A.D.; AKILOV, G.P.; ASHNEVITS, I.Ya.; VALLANDER, S.V.;  
VLADIMIROV, D.A.; VULIKH, B.Z.; GABURIN, M.K.; KANTOROVICH, L.V.;  
KOLBINA, L.I.; LOZINSKIY, S.M.; LADYZHENSKAYA, O.A.; LYNNIK, Yu.V.;  
LEBEDEV, N.A.; MIKHILIN, S.G.; MAKAROV, B.M.; NATANSON, I.P.;  
NIKITIN, A.A.; POLYAKHOV, N.N.; PINSKER, A.G.; SMIRNOV, V.I.;  
SAFRONOVA, G.P.; SMOLITSKIY, Kh.L.; PADMEYEV, D.K.

Grigori Mikhailovich Fikhtengol'ts; obituary. Vest. LGU 14 no.19:  
158-159 '59. (MIRA 12:9)  
(Fikhtengol'ts, Grigori Mikhailovich, 1888-1959)

KONSTANTINOV, B.P.; DEBORIN, A.M., akademik; PEYVE, Ya.V.; IOFFE, A.F.,  
akademik; MIKHAYLOV, A.I., prof.; SATPAYEV, K.I., akademik;  
ZHUKOV, Ye.M., akademik; LAVRENT'YEV, M.A., akademik; SEMENOV, N.N.,  
akademik; PAVLOVSKIY, Ye.N., akademik; MINTS, I.I., akademik;  
SISAKYAN, N.M.; ROMASHKIN, P.S.; FEDOROV, Ye.K.; STECHKIN, B.S.,  
akademik; MAYSKIY, I.M., akademik; PAVLOV, Todor, akademik;  
ARBUZOV, A.Ye., akademik; VASIL'YEV, N.V., doktor ekon.nauk;  
BELOUSOV, V.V.; MITIN, M.B., akademik; BLAGONRAVOV, A.A., akademik;  
KANTOROVICH, L.V.; RYBAKOV, B.A., akademik; NEMCHINOV, V.S., akademik  
Discussion of the address. Vest. AN SSSR 29 no.4:34-63 Ap '59.  
(MIRA 12:5)

1.Chlen-korrespondent AN SSSR (for Konstantinov, Peyve, Sisakyan,  
Romashkin, Fedorov, Belousov, Kantorovich).  
(Science)

KANTOROVICH, L.V., prof.

Works on approximate computation. Trudy mat. inst. 53:3-4  
Trudy mat. inst. 53:3-4 '59. (MIRA 12:9)

1. Chlen-korrespondent AN SSSR.  
(Approximate computation)

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16(1), 16(2), 30(5)

AUTHORS: Kantorovich, L.Y., Corresponding Member SOV/20-129-4-5/68  
of the AS USSR, and Gor'kov, L.I.

TITLE: Some Functional Equations That Arise in Analysing a Single-Product Economic Model 12

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 4, pp 732-735 (USSR)

ABSTRACT: For the investigation of economic processes the authors recommend mathematical models which lead to differential- and integro-differential equations which can be integrated numerically step by step. Thus it is possible to determine the influence of several factors (parameters of the model) to the economic characteristics of the process. The models may serve also for an examination of the exactness and legality of several methods of calculation usual in economy. Three cases are considered, e.g.: Let  $t$  be the time,  $T(t)$  be the set of work at one's disposal,  $R(t)$  be the raw materials at one's disposal. Let  $U(R, T)$  be the set of goods produced in the unit of time. If  $U(R, T)$  is assumed to be a homogeneous function, then

$$(1) \quad U(R, T) = \int_0^n R^\alpha T^{n-\alpha} d\alpha,$$

Card 1/2

KANTOROVICH, L.V.

- 2) A. N. Biryuk - The Differential Equations of Exponential Reproduction
- 3) V. V. Buzdakov - Optimal Planning and Economic Indicators in the Conditions of Production
- 5) S. S. Vukobrat - Mathematical Analysis of Mass and Proportions in the National Income
- 6) S. S. Rybakina, S. P. Moser - Price Relationships in Regional Economic Efficiency of Capital Investment
- 7) S. S. Vukobrat and V. S. Khokhlov - Statistical (and) Dynamic Models of a National Income
8. Reading Session - 15 December 1979, 1600 hours  
IX. The Theory of Linear Programming
- 1) G. G. Rebutskaya - Review of Methods for the Solution of Linear Programming Problems
- 2) A. S. Bur'yev - Algorithmic Solutions of Transport Problems Through Approximation by Means of Hypercubically Optimal Plans
- 3) S. P. Gerasimov - The Algebra of Linear Programming
- 4) S. P. Rybakov, A. A. Gerasimov - Recommendation for Method of Reconstructing Changes of Dual Price Coefficients under Conditions of Changing Technology
- 5) S. Gerasimov - A Practical Interpretation of Karush-Kuhn's Controlling Multipliers
- 6) Sidor and Sidorov - Linear Programming Methods and Material Supply
9. Reading Session - 16 December 1979, 1600 hours  
XII. Economic Models and Dynamic Programming
- 1) V. V. Buzdakov - Mathematical Models of the National Economy in Macroeconomic Economics and a Critique thereof
- 2) S. S. Rebutskaya - Mathematical Models of the National Economy in the Conditions of Capital Investment
- 3) V. V. Bur'yev - Concerning the Economic Cycle Models and Dynamic Economic Models of Economic Concentrations
- 4) V. V. Bur'yev - Problems in the Application of Dynamic Models of Economic Development
- 5) S. Gerasimov - Economic Planning Models and the Analysis of Economic Growth Indicators
- 6) V. S. Rebutskaya - The Dynamic Programming Method and Its Use in Economics
- 7) S. S. Gerasimov - The Expanding (shrinking) Matrix as a Model for the Application of Mathematical Methods in Long-Term Economic Planning
10. Reading Session - 16 December 1979, 1600 hours  
XI. The Transportation Problem
- 1) S. S. Vukobrat - Finding the Most Suitable Assignment of Various Types of Fleet Vessels to Lines
- 2) A. S. Rebutskaya - Experimental Methods in Economic Research on the Optimum Spatial Distribution of Projects
- 3) S. P. Bur'yev - The Application of Linear Programming to Air Transport Economics

report submitted at the Soviet Conference on Problems in the Application of Mathematical Methods in Economic Research, Leningrad, March-July 1960.

KORBUT, A.A., mladshiy nauchnyy sotr.; NEMCHINOV, V.S., akademik, otv. red.; KANTOROVICH, L.V., otv. red. toma; GERCHUK, Ya.P., kand. ekon. nauk, dotsent, otv. red. toma; RUBINSHTEYN, G.Sh., kand. fiz.-matem. nauk, dotsent, otv. red. toma; SEREBROVSKIY, L.A., red. izd-va; VOLKOVA, V.V., tekhn. red.

[Works of the Scientific Conference on the Use of Mathematical Methods in Economic Planning and Research] Trudy Nauchnogo soveshchaniya o primeneni matematicheskikh metodov v ekonomicheskikh issledovaniyakh i planirovani. 1960. Moskva, Izd-vo Akad. nauk SSSR. Vol.4. [Linear programming] Lineinoe programirovanie. 1961. 126 p. (MIRA 15:1)

1. Nauchnoye soveshchaniye o primeneni matematicheskikh metodov v ekonomicheskikh issledovaniyakh i planirovani. 1960.
2. Chlen-korrespondent AN SSSR (for Kantorovich). 3. Moskovskiy institut stali (for Gerchuk). 4. Leningradskoye otdeleniye Matematicheskogo instituta im. V.A.Steklova AN SSSR (for Korbuto).
5. Laboratoriya po primeneniyu matematicheskikh i statisticheskikh metodov v ekonomike Sibirskogo otdeleniya AN SSSR (for Rubinshteyn).

(Linear programming) (Economics, Mathematical)

KANTOROVICH, Leonid Vital'yevich; KRYLOV, Vladimir Ivanovich;  
LUK'YANOV, A.A., tekhn. red.

[Approximate methods of higher analysis] Priblizhennye metody  
vysshego analiza. Izd.5., ispr. Moskva, Fizmatgiz, 1962.  
708 p. (MIRA 15:11)  
(Mathematical analysis)



16,6500

S/199/62/003/005/002/004  
B112/B186

AUTHOR: Kantorovich, L. V.

TITLE: Some new approaches to computing methods and processing of observations

PERIODICAL: Sibirskiy matematicheskiy zhurnal, v. 3, no. 5, 1962, 701-709

TEXT: Some new methods of numerical computation are discussed, whereby modern computer and data processing problems can be more adequately solved than by the traditional methods. No new theory is developed but several concrete examples are given to illustrate such operations as determining the value of a polynomial at a given point; determining the bound of a linear form under certain conditions computing the upper and the lower bound of the solution to an algebraic system ( for this purpose, an operator  $\sigma$  converting the lower into the upper bound is introduced); handling observations by evaluation of inequalities instead of by the traditional Gaussian method of least squares; the inverse problem in potential theory. In the final section of the paper, the completion of instable computation schemes by additional difference inequalities is

✓B

Card 1/2

Some new approaches to computing...

S/199/62/003/005/002/004  
B112/B186

considered. In one example, e.g. 70 points were measured with a precision  $\delta = 0.1$ ;  $m_j$  was investigated in 36 points by means of the ЭОМ ММ СО (EVM IM SO) type computer of the Academy of Sciences of the USSR. ✓B

SUBMITTED: July 2, 1962

Card 2/2

AKILOV, G.P.; VLADIMIROV, D.A.; KANTOROVICH, L.V.; NATANSON, I.P.

Boris Zakharovich Vulikh, 1913 - ; on his 50th birthday. Usp.  
mat. nauk 18 no.6:242-243 '63. (MIRA 17:3)

BULAVSKIY, Vladimir Aleksandrovich; RUBINSHTEYN, Gennadiy  
Shlemovich; KANTOROVICH, L.V., akademik, stv. red.;  
ZAYTSEVA, I.P., red.

[Several lectures on linear programming] Neskol'ko lektssi  
po lineinomu programmirovaniyu. Novosibirsk, Red...izd.  
otdel Sibirskogo otdeleniia AN SSSR, 1965. 66 p.  
(MIRA 18:5)

KANTOROVICH, L.V., akademik; ROMANOVSKIY, I.V.

Depreciation allowed for equipment under optimum conditions of use.  
Dokl. AN SSSR 162 no.5.1015-1018 Ja '65. (MIRA 18:7)

1. Institut matematiki Sibirskogo otdeleniya AN SSSR i Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova.

L 00365-66 EWT(d)/T/EED-2/EWP(1) IJP(c) BB/GG

ACCESSION NR: AP5021615

UR/0286/65/000/013/0092/0092

AUTHORS: Kantorovich, L. V. <sup>44</sup> Fet, Ya. I. <sup>44</sup>

TITLE: Computer system <sup>16.77</sup> consisting of a general purpose digital computer and a <sup>4/3</sup>  
small computer. Class 42, No. 172567 <sub>38</sub>

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 13, 1965, 92

TOPIC TAGS: computer system, digital computer

ABSTRACT: This Author Certificate presents a computer system consisting of a general purpose digital computer and a small digital computer. The small computer contains a high speed arithmetic device with an operational memory unit with small capacity of trigger registers, a control microprogram unit, and a semiconstant memory unit for the normal program. To increase the effective response rate of this system by supplying a significant portion of the operations to the small computer, to broaden the class of problem solvable by the system by dividing the functions between the general purpose and small machines, and to utilize in the system any general purpose machine without significant changes in its design, the command decoder output of the general purpose machine is connected through a matching device to the unit input of the blocking trigger whose zero output is

Card 1/3

L 00365-66

ACCESSION NR: AP5021615

connected through a matching device to the cycle pulse gate of the general purpose machine. The command decoder output is connected through a matching device to the first input of a gate whose second input is connected to the zero output of a trigger-distributor. The output of this gate is connected to the first inputs of the beginning address gates of the argument block in the operational memory unit of the general purpose machine, to the first inputs of the beginning address gates of the normal subprogram in the semiconstant memory unit of the small machine, and to the first inputs of the cycle number index gates of the normal subprogram. The second inputs of the index gates are connected through a matching device to the digit outputs of the address portion of the command register of the general purpose machine. The outputs of these gates are connected respectively to the one inputs of the address register triggers of the operational memory unit of the general purpose machine. The outputs of these triggers are connected through a matching device to the address code shaper of the general purpose machine and to the one inputs of the command address register triggers of the small machine. The outputs of these triggers are connected to the address decoder of the semiconstant memory unit of the small machine and to the one inputs of the cycle counter triggers of the normal subprogram. The counter output is connected to the zero inputs of the trigger-distributor and blocking trigger. The outputs of the code shapers of the general purpose machine are connected through a matching device to the first inputs of a group of number admission gates whose second inputs are connected to the

Card 2/3

L 00365-66

ACCESSION NR: AP5021615

2

output of the control microprogram device and whose outputs are connected to the inputs of the arithmetic device registers of the small machine. The outputs of the arithmetic device registers are connected to the first inputs of a group of number distribution gates whose second inputs are connected to the output of the control microprogram device and whose outputs are connected through a matching device to the code shaper inputs of the general purpose machine. The output of the cycle generation of the small machine is connected to the first input of gate whose second input is connected to the one input of a synchronizing trigger and whose output is connected to the first input of a cycle pulse collecting circuit. The output of the cycle generator of the general purpose machine is connected through a matching device to the first input of a gate whose second input is connected to the zero output of the synchronizing trigger and whose output is connected to the second input of the cycle pulse collecting circuit. The inputs of the synchronizing trigger are connected to the outputs of the control microprogram device. The output of the cycle pulse collecting circuit is connected to the input of the microcommand counter of the small machine.

ASSOCIATION: Institut matematiki, SO AN SSSR (Institute of Mathematics, SO AN SSSR)

SUBMITTED: 02 Nov 63  
NO REF SOV: 000

ENCL: 00  
OTHER: 000

SUB CODE: DP

44

Card 3/3



ACC NR: AP7001438

(A,N)

SOURCE CODE: UR/0413/66/000/021/0159/0159

INVENTORS: Kantorovich, L. V.; Fet, Ya. I.; Ilovayskiy, I. V.

ORG: none

TITLE: Summator for simultaneous addition of several binary terms. Class 42, No. 188151 [announced by Institute of Mathematics, Siberian Division AN SSSR (Institut matematiki Sibirskogo otdeleniya AN SSSR)]

SOURCE: Izobreteniya, promyshlennyye obrastay, tovarnyye znaki, no. 21, 1966, 159

TOPIC TAGS: addor, binary number, coincidence circuit

ABSTRACT: This Author Certificate presents a summator for simultaneous addition of several binary terms with storage of the transfers and accumulation of the results, consisting of single-digit triple-input summators. To increase the response rate, the outputs of the combination circuits of each of the single-type p-digit units of the summator are connected through coincidence circuits digit by digit to the inputs of the intermediate result storage register of the given unit. The outputs of the digit groups of the intermediate result storage register are connected through coincidence circuits and auxiliary storage units digit by digit to the inputs of the corresponding digits of each unit of the summator. The outputs of the new term registers are connected digit by digit to the free inputs of the summator units. To generate the total sum in normal form with minimal additional equipment cost, the

Cord 1/2

UDC: 681.142.07

ACC NR: AP7001438

lowest output channels of the combination circuit of each unit are connected digit by digit through coincidence circuits to the inputs of the intermediate result storage register of the given unit. The following output channels of the combination circuit of each unit are connected digit by digit through coincidence circuits to the inputs of the intermediate result storage register of the given unit and also to the inputs of the first group of coincidence circuits of the highest unit. The outputs of the corresponding digits of the new term registers are connected to the first inputs of the second group of coincidence circuits of each summator unit. The outputs of the first and second groups of coincidence circuits are connected to the inputs of the corresponding accumulation circuits whose outputs are connected to the free inputs of the corresponding digits of the following highest unit. A storing summation signal is fed to the second inputs of the second groups of coincidence circuits of all units. An assimilation signal is fed to the second inputs of the first groups of coincidence circuits of all units. To increase the response rate, the outputs of the combination circuit of each unit are connected through the first group of coincidence circuits to the inputs of the first intermediate result storage register of the given unit and through the second group of coincidence circuits to the inputs of the second intermediate result storage register of the given unit. The outputs of the first register are connected through the third group of coincidence circuits to the first inputs of the accumulation circuits. The outputs of the second register are connected through the fourth group of coincidence circuits to the second inputs of the accumulation circuits. The inputs of the accumulation circuits are connected digit by digit to the corresponding inputs of the given and following summator units.

SUB CODE: 09/ SUBM DATE: 15Mar65

Card 2/2

5 (2)

AUTHORS: Kornilov, I. I., Kantorovich, L. Ya. SOV/62-59-6-2/36

TITLE: Investigation of One Part of the Four-component System Fe-Cr-Ni-Mn  
(Issledovaniye chasty chetvernoy sistemy Fe-Cr-Ni-Mn)

PERIODICAL: Investiya Akademii nauk USSR. Otdeleniye khimicheskikh nauk,  
1959, Nr 6, pp 963-970 (USSR)

ABSTRACT: The phase diagram of the four-component system mentioned in the title is investigated in one section (I) (Fig 3) on the line with constant Ni-content of 10 %, parallel to the Fe-Cr part. Alloys were investigated with variable content of Cr in 6 sections and Mn (Cr 10, 20, 30, 50, 60 and 75 %, and a change of the Mn-content at each of these values in the range of from 0-70 %). Armco iron, metallic chromium, and electrolytically produced nickel and manganese were the components of the alloys. The chemical composition of the alloys investigated is given in table 1 (Table 2 contains data on their microstructure). With the alloys the microstructure, the strength, the electric resistance, and with some, also their magnetic properties were investigated. The data obtained by these investigations served for constructing the diagram of the system. In the iron corner of this diagram the boundaries of the phase ranges  $\alpha$ ,  $\alpha + \delta$ ,  $\delta$  and  $\delta'$ , and that of

Card 1/2

Investigation of One Part of the Four-component System SOV/62-59-6-2/36  
Fe-Cr-Ni-Mn

a number of interlaying ranges were determined. Furthermore, the dependence of the change in strength and electrical conductivity on the composition and the phase construction was investigated. Alloys with a composition of 49.7 % Mn, 38 % Cr, 5 % Ni, 7.3 % iron exhibited the highest ohmic resistance ( $1.31 \Omega / \text{mm}^2$ ). In the system investigated 15 different phase ranges were determined. The most important share in the phase diagram is held by the solid austenite ( $\gamma$ ) solution with manganese. The phase ranges  $\alpha$ ,  $\gamma$  and  $\sigma$  denote: a solid solution,  $\alpha$ -Fe on Fe-basis (ferrite), and  $\alpha$ -Cr on Cr-basis, the solid solution  $\gamma$ -Fe (austenite),  $\sigma$  the phase of the compound FeCr,  $\alpha$ -Mn the solid solution on  $\alpha$ -Mn-basis. There are 12 figures, 3 tables, and 9 references, 6 of which are Soviet.

ASSOCIATION: Institut metallurgii im. A. A. Baykova Akademii nauk SSSR  
(Institute of Metallurgy imeni A. A. Baykov of the Academy of Sciences, USSR)

SUBMITTED: September 13, 1957  
Card 2/2

KANTOROVICH, M.

GASTRIC JUICE

Conference on the use of natural gastric juice. Fiziol. zhur. 38 no. 4, 1952.

Monthly List of Russian Accessions Library of Congress, November 1952. UNCLASSIFIED

*Kantorovich, M. A.*

IL'YEVICH, A.I.; KANTOROVICH, M.A.; KRASINA, E.M.; RAPOPORT, B.I.

Analgesia in cancer. Vop. onk. 2 no.1:66-71 '56

(MIRA 9:4)

1. Iz Ukrainiskogo rentgeno-radiologicheskogo i onkologicheskogo  
instituta (dir.-dotsent Ye.A. Baslov)

(NEOPLASMS

pain in incurable cases, analgesia)

(ANALGESIA

in incurable cancer)

KANTOROVICH, M.I.

"Operational Calculus and Transient Phenomena in Electrical Circuits"  
(Operatsionnoye ischisleniye i nestatsionarnyye yavleniya v elektricheskikh tsepyakh).  
Izd Voennoy akademii svyazi im Budennogo (Publishing House of Military Academy of  
Communications imeni Budennyy), 146 pp., 1947

KANTOROVICH, M.M.; FREYDOVICH, A.I.

A new method for the formation of ureteral fistula. Fiziol. zhur.  
45 no.5:623-624 My '59. (MIRA 12:7)

1. Eksperimental'naya laboratoriya Okruzhnogo voyennogo gospihalya,  
Petrozavodsk.  
(URETERS, fistula,  
exper. technic in dogs (Rus))



KANTOROVICH, M.M.

Data on the characteristics of certain typological aspects of the higher nervous activity in man as determined by means of the vascular reflex method. Biul. eksp. biol. i med. 49 no. 5:20-24 My '60. (MIRA 13:12)

1. Iz eksperimental'noy laboratorii Okruzhnogo voyennogo gospihalya, Petrosavodsk. Predstavlena deystvitel'nym chlenom AMN SSSR V.N. Chernigovskim.

(CONDITIONED RESPONSE) (BLOOD VESSELS)

KANTOROVICH, M.M. (Petrozavodsk); FREYDOVICH, A.I. (Petrozavodsk)

Method for study of the urinary bladder. *Fiziol. zhur.* 46 no.11:  
1417-1419 N '60. (MIRA 13:11)  
(BLADDER) (FISTULA)

KANTOROVICH, M.M., podpolkovnik meditsinskoy sluzhby

Work of an experimental laboratory. Voen.-med.zhur.no.8:  
78-79 Ag'58. (MIRA 16:7)

(MEDICAL LABORATORIES)

KANTOROVICH, M. M.

Kantorovich, M. M.

"Determination of the typological features of the nervous system of man by the method of vascular reflexes." Acad Sci USSR. Inst of Physiology. imeni I. P. Pavlov. Leningrad, 1956. (Dissertation for the Degree of Candidate in Medical Sciences).

Knizhnaya letopis'  
No. 21, 1956. Moscow.

ROGOV, A.A.; GORLANOVA, T.T.; KANTOROVICH, M.M.; KOVALEVA, N.T.

Changes in vascular conditioned and unconditioned reflexes  
in man depending on typological characteristics of the  
nervous system. Zhur. vys. nerv. deiat. 14 no. 4:602-607  
Jl-Ag '64. (MIRA 17:12)

1. Pavlov Institute of Physiology, U.S.S.R. Academy of  
Sciences, and Military Medical Museum of U.S.S.R.  
Ministry of Defense, Leningrad.

IVANISHCHEV, G.G., inshener; ~~KANTOROVICH~~, M.S., inshener.

Pressing bushings without further processing. Stroi.1 der.mashino-  
str. 1 no.10:27-29 0 '56. (MLA 9:11)  
(Machine-shop practice)

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KANTOROVICH, N. V.

32794. AVHUTIS, B. M.; KANTOROVICH, N. V.; i KOVALEV, A. I. Lechyniye psikhonevrotikov na kurente koyaara, sbornik nauch.-trudov (Kirgis. Gos. Med. In-t), T. IV, 1949, s. 66-72

SO: letopis' Zhurnal'nykh Statoy, Vol. 44, Moskva, 1949



KANTOROVICH, N.V.

KANTOROVICH, N.V.

~~Further findings in quinine therapy of schizophrenia.~~ Zh. nevropat.  
psikhiat., Moskva 52 no.1:49-53 Jan 52. (CJML 21:5)

1. Professor. 2. Prusse.

*Kantorovich, N.V.*

USSR/Human and Animal Physiology - Nervous System.

R-12

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 71160

Author : Kantorovich, N.V.

Inst :

Title : On the Determination of the Types of Human Higher Nervous Activity Outside of the Laboratory.

Orig Pub : Tr. Kirg. med. in-ta, 1956, 8, 387-393

Abstract : For obtaining further details of types of higher nervous activity in man, "author proposes a scheme in which a thorough anamnesis is collected from the subject and his relatives, and the object is observed in different situations. Criteria for judgment of the strength, balance, and motility of the nervous process and the interrelation among the signal systems are introduced.

Card 1/1

- 104 -

KANTOROVICH, N.V.; RYBKINA, I.V.

Some cerebral mechanisms in the development of insulin hypoglycemia.  
Zhur.nevr. i psikh. Supplement:86 '57. (MIRA 11:1)

1. Iz kafedry psikhiiatrii (zav. - prof. N.V.Kantorovich) Kirgiz-  
skogo meditsinskogo instituta, Frunse.  
(HYPOGLYCEMIA) (INSULIN) (CONDITIONED RESPONSE)

KANTOROVICH, Nikolay Vital'yevich; DEGTYAREV, B.N., red.; CHOTIYEV, S.,  
tekh. red.

[Essays on healthy and pathological psychology] Ocherki o zdo-  
rovoi i bol'noi psikhike. Frunze, Kirgizgosizdat, 1962. 159 p.  
(MIRA 16:4)  
(PSYCHOLOGY, PSHYSIOLOGICAL) (PSYCHOLOGY, PATHOLOGICAL)

KANTOROVICH, N.V. (Frunze)

"positive results in the treatment of certain mental diseases with the aid of the factors of the high-altitude climate."

Report presented at the Scientific Conference devoted to the problems of physiology and pathology in High Altitudes, Ministry of Health Tadzhik SSR and Medical Institute im. Abdul' Ibn-Sino, held in Dushanbe, October 1962. (Zdravookhraneniye Tadzhikstana, Dushanbe, No. 3, 1963, p. 37-39).

KANTOROVICH, R.A.

Method of detection of influenza antigens in the blood and in the nasopharynx in patients. Trudy AMN SSSR 28:104-122 '53. (MLRA 7:8)

1. In Otdela virusologii Instituta eksperimental'noy meditsiny AMN SSSR.

(INFLUENZA, immunology,  
antigens & blood & nasopharynx, detection technic)  
(ANTIGENS AND ANTIBODIES,  
influenza antigens, technic of detection in blood &  
nasopharynx)

KANTOROVICH, R.A.

KOROVIN, A.A.; NOVOSILOVA, A.I.; KANTOROVICH, R.A.

Clinical and laboratory characteristics of influenzal pneumonia.  
Trudy AMN SSSR 28:189-197 28:189-197 '53. (MLRA 7:8)

1. Iz Otdela virusologii Instituta epidemiologii im. Pastera i  
propedevticheskoy terapevticheskoy kliniki i Leningradskogo  
meditsinskogo instituta im. I.P.Pavlova.

(INFLUENZA,  
influenzal pneumonia)

(PNEUMONIA,  
influenzal pneumonia)

*Paster*

*2*

KANTOROVICH, R.A.  
DONSKAYA, L.V.; KANTOROVICH, R.A.

Changes in the neuromuscular system in experimental encephalomyelitis and poliomyelitis of white mice. Nov.med. no.38:71-76 '53. (MLRA 7:5)

1. Iz kafedry normal'noy fiziologii (zaveduyushchiy - professor Yu.M. Uflyand) Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta i Otdela virusologii (zaveduyushchiy - chlen-korrespondent Akademii meditsinskikh nauk SSSR professor A.A.Smorodintsev) Instituta eksperimental'noy meditsiny Akademii meditsinskikh nauk SSSR.  
(Encephalomyelitis) (Poliomyelitis)



KANTOROVICH, R.A.

History of studies on influenza in Russia. Zhur.mikrobiol.epid.i  
immun. no.8:106-110 Ag '54 (MLBA 7:9)

1. In virusologicheskoy laboratorii Arkhangel'skogo instituta  
epidemiologii, mikrobiologii i gigiyeny (dir. M.Ya.Alder'yeva,  
nauchnyy rukovoditel' O.N.Dodonova)  
(INFLUENZA,  
hist. of research in Russia)

KANTOROVICH, K. A.

USSR / Virology. Human and Animal Viruses

E-2

Abs Jour: Ref Zhur - Biol., No 6, 1958, 24012

Author : Kantorovich, R. A.

Inst : Not given

Title : Etiology of "Wildness" in Animals in Zapolyar'ye.  
Communication 2. Pathomorphology of the Central  
Nervous System in Experimental "Wildness."

Orig Pub: Vopr. virusologii, 1956, No 5, 33-39

Abstract: A study was conducted on the morphology of cerebral hemispheres, cerebellum and medulla oblongata of mice, guinea pigs and rabbits infected with a 10% emulsion of brain tissue of two foxes with clinical characteristics of "wildness," as well as the morphology of the brain tissue of animals infected. The inflammation characteristics at the height of clinical disease was determined in membranes, the

Card 1/3

USSR / Virology. Human and Animal Viruses

E-2

Abs Jour: Ref Zhur - Biol., No 6, 1958, 24012

Abstract: changes in "wildness" and rabies. However, the pathomorphology in "wildness" manifests itself by a certain uniqueness: Negri bodies are rarely met, and are represented by small structureless compact formations; there are intranuclear inclusions; inflammatory phenomena are markedly expressed; frequently vacuoli are found in cell protoplasm with a central basophile structure. (Communication 1, see RefZhur Biol, 1957, 26154).

Card 3/3

USSR/Virology - Viruses of Man and Animals.

D-3

Abs Jour : Ref Zhur - Biologiya, No 7, 10 April 1957, 26154

Author : Kantorovich, R.A.

Inst :

Title : The Etiology of Hydrophobia in Animals of Trans-Polar Regions. A Report. I. The Biological Properties of Virus.

Orig Pub : Vopr. virusologii, 1956, No 2, 32-37

Abst : A study is made of 2 strains of virus isolated in foxes suffering from hydrophobia. These strains induced symptoms in experimental laboratory animals (mice, rabbits, guinea pigs, pack rats) that are characteristic of disorders of the central nervous system: tremors of the body, impairment of coordination, paresis of the extremities and convulsions, followed by death. Filtration of the material revealed pathogenic activity and confirmed the viral nature of the strains. The strains showed considerable resistance to storage in 50% glycerine (pathogenic

Card 1/2

*Virology Lab, Arkhangel'sk Sci Res Inst Epidemiol, Microbiol. & Hygiene*

*Kantorovich, R. A.*

DOMSKAYA, I.V.; KANTOROVICH, R.A.

- Characteristic of the state of the motor apparatus in poliomyelitis.  
Trudy LSGMI 29:240-249 '56. (MLRA 10:9)

1. Kafedra normal'noy fiziologii (zav. - prof. Yu.M.Uflyand) Lenin-  
gradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta i  
Otdel virusologii (zav. - chlen-korrespondent AMN SSSR, prof.  
A.A.Snorodintsev) Instituta eksperimental'noy meditsiny  
(POLIOMYELITIS, physiology,  
motor appar. (Rus))

KANTOROVICH, R.A.

The etiology of madness in polar animals. Acta virol. Engl. Ed. Praha  
1 no.3-4:220-228 July-Dec 57.

1. Laboratory of Virology of the Institute of Experimental Medicine,  
Arkhangelsk, and the Department of Virology of the Leningrad Pasteur  
Institute of Epidemiology and Microbiology, U.S.S.R.

(RABIES

polar madness in arctic animals, isolation of etiol. virus)

(ANIMALS, dis.

same)

USSR / Virology. Human and Animal Viruses. Rabies Virus.

E-3

Abs Jour : Ref Zhur - Biol., No 18, 1958, No 81290

Author : ~~Kantorovich, R. A.~~

Inst : Not given

Title : Etiology of "Wilding" Animals in Transpolar Regions. Report  
3. Serological and Antigenic Properties of the "Wilding" Virus.

Orig Pub : Vopr. virusologii, 1957, No. 4, 208-210.

Abstract : An antigenic relationship was found between rabies and  
"wilding" viruses in neutralization reactions and cross in-  
minization. The wilding virus in its aggregate properties dif-  
fers from the vector of encephalitis in polar foxes and foxes.  
In the author's opinion, the virus represents a variant of  
rabies vector. -- I. A. Shumeykina.

Card 1/1

KANTOROVICH, R.A., kandidat meditsinskikh nauk.

Arctic fox as carriers of rabies in the Far North. Veterinariia  
34 no.8:51-52 Ag '57. (MLRA 10:9)

1. Arkhangel'skiy nauchno-issledovatel'skiy institut epidemiologii,  
mikrobiologii i gigiyeny.  
(Arctic regions--Rabies) (Foxes--Diseases and pests)



KANTOROVICH, R. A.

USSR / Virology. Human and Animal Viruses. Hepatitis  
Viruses.

E-3

Abs Jour : Ref Zhur - Biol., No 20, 1958, No 90628

Authors : Kheyfets, L. B.; Kamolikova, T. L.; Kantorovich, F. A.

Inst : Not given

Title : Outbreak of Epidemic Hepatitis in an Arctic Settlement.

Orig Pub : Vopr. virusologii, 1958, No. 1, 47-49

Abstract : No abstract given.

Card 1/1

Vol. 21, No. 12  
1960

# Immunological and Epidemiological Effectiveness of Live Poliovirus Vaccine in the USSR.

A. A. BUDAGOVSKIY, A. I. DROZDETSKIY, N. P. MELNIKOV,  
O. M. CHALIKOV, O. M. GROMOV, V. I. LITVINOV, L. A. KANTOROVICH,  
L. M. ELISEYEV, E. G. VASILEV, V. E. VOTVAYALOV & G. P. ZILBERMAN

In 1959 a total of 1,200,000 children up to 14-15 years old in the USSR, by the age of 15, had received the live poliovirus vaccine. The results show that the vaccine is highly effective and safe. The immunological and epidemiological effectiveness of the vaccine was studied in the following manner: in the first group of children, the immunological response to the vaccine was studied; in the second group, the epidemiological effectiveness of the vaccine was studied. The results of the study show that the vaccine is highly effective and safe. The immunological response to the vaccine was studied in the first group of children. The results show that the vaccine is highly effective and safe. The epidemiological effectiveness of the vaccine was studied in the second group of children. The results show that the vaccine is highly effective and safe.

*Bulletin of the World Health Organization*, Vol. 23, No. 6, 1960.

From the Third Department, Inst. of Experimental Medicine, USSR Acad. Med. Sci.

KANTOROVICH, R.A.

Epizootology of "madness" in animals in the Arctic regions. Trudy  
Len.inst.epid.i mikrobiol. 17:169-179 '58. (MIRA 16:2)

1. Iz virusologicheskoy laboratorii (sav. - kand.med.nauk R.A.  
Kantorovich) Arkhangel'skogo instituta epidemiologii mikrobio-  
logii i gigiyeny i otdela virusologii (sav. - chlen-korrespondent  
AMN SSSR prof. A.A. Smorodintsev) Leningradskogo instituta epi-  
demiologii, mikrobiologii i gigiyeny imeni Pastera.  
(ARCTIC REGIONS--RABIES)

KANTOROVICH, R.A.; KURNOSOVA, L.M.; ZHILOVA, G.P.

Study of the immunological structure of the population of Leningrad in relation to the poliomyelitis viruses. Trudy Len.inst. epid.i mikrobiol. 19:131-140 '59. (MIRA 16:2)

1. Iz laboratorii poliomiylita (rukovoditel' Kh.S. Kotlyarova) Leningradskogo instituta epidemiologii, mikrobiologii i gigiyeny imeni Pastera i otdela virusologii Instituta epidemiologii i mikrobiologii AN SSSR (rukovoditel' - chlen-korrespondent AN SSSR prof. A.A. Smorodintsev).  
(IMMUNOLOGY) (LENINGRAD-POLIOMYELITIS VIRUSES)

SMORODINTSEV, A.A.; DROBYSHEVSKAYA, A.I.; BULYCHEV, N.P.; VASIL'YEV, K.G.;  
VOTYAKOV, V.I.; GROYSMAN, G.M.; ZHILOVA, G.P.; IL'YENKO, V.I.;  
KANTOROVICH, R.A.; KURNOSOVA, L.M.; CHALKINA, O.M.

Material on the immunological and epidemiological effectiveness  
of live poliomyelitis vaccine. Vest. AMN SSSR 15 no.6:45-58 '60.  
(MIRA 14:4)

1. Otdel virusologii Instituta eksperimental'noy meditsiny AMN SSSR.  
(POLIOMYELITIS)

KANTOROVICH, R.A.; MARKARYAN, A.G.

Pathogenicity of the virus of "madness" for man. Vop. virus  
no.6:747 N-D '63. (MIRA 17:6)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.

ZASLONOV, M.S.; KANTOROVICH, R.A., kand.med.nauk

Epizootiology of rabies in animals in the forest-steppe zone of the Southern Urals. Veterinariia 40 no.7:13-14 J1 '63.

(MIRA 16:8)

1. Direktor Troitskoy veterinarnoy laboratorii (for ZaslonoV).
2. Institut virusologii AMN SSSR (for Kantorovich).  
(Ural Mountain region--Rabies)

KANTOROVICH, R.A.

Materials on the ecology of the "madness" of animals beyond  
the Arctic Circle. Biul. MOIF. Otd. Biol. 68 no.4:3-13 Jl-Ag '63.  
(MIRA 16:10)



KANTOROVICH, R.A.

Natural foci of rabies-like infection in the Far North.  
J.hyg. epidem., Praha 8 no.1:100-110 '64.

1. Ivanovsky Institute of Virology, Academy of Medical  
Sciences of the U.S.S.R., Moscow.

\*

SELENOV, Midat Abdurakhmanovich; KLYUYEVA, Ye.V.; SEMENOVA, Ye.V.  
KANTOROVICH, R.A., red.

[Contemporary methods for the laboratory diagnosis of  
rabies] Sovremennyye metody laboratornoi diagnostiki be-  
shenstva. Moskva, Meditsina, 1964 p. 56 p.

(MIRA 17:9)

KONOVALOV, G.V.; KANTOROVICH, R.A.; BUZINOV, I.A.; RIUTOVA, V.P.

Experimental investigations into rage and rabies in polar foxes, natural hosts of the infection. II. An experimental morphological study of rabies in polar foxes. Acta virol. (Praha) [Eng] 9 no.3:235-239 My'65.

1. Department of Morbid Anatomy, Institute of Experimental Medicine, U.S.S.R. Academy of Medical Sciences, Leningrad; Institute of Virology, U.S.S.R. Academy of Medical Sciences, Moscow; and Scientific Research Institute of Fur Animal and Rabbit Husbandry, Ministry of Agriculture of the Russian S.F.S.R., Moscow.

ANTONOV, G.P.; KONDOROVICH, E.A.

Immunological effectiveness of the vaccination of the child population of Novgorod Province with live poliovirus vaccine. Trudy Len. inst. epid. i mikrobiol 26:83-95 '64.

(MVA 19.12)  
1. Iz otdela virusologii Instituta eksperimental'noy meditsiny ANU SSSR i laboratorii poliomyelita Leningradskogo Instituta imeni Pastera.

KANTOROVICH, R.A.; BGANTSEVA, I.V.; ZHILOVA, G.P.; KUZNETSOVA, R.I.;  
OSTROVSKIY, G.D.; RABY, Ye.A.

Comparative study of the epidemiological effectiveness of  
the inoculation with live and killed poliovirus vaccines.  
(1959-1960). Trudy Len. inst. epid. i mikrobiol. 26:70-82 '64.  
(MIRA 18:12)

1. Iz laboratorii poliomyelita instituta imeni Pastera, otdela  
virusologii Instituta eksperimental'noy meditsiny AMN SSSR i  
sanitarno-epidemiologicheskikh stantsiy Pskovskoy, Novgorodskoy  
i Leningradskoy oblastey.

KANTOROVICH, R. M.

33595. Sluchay Labirintogennogo Meningita, Lechennogo Labirintektomiyey S Primeneniyem Penitsillina. Vesnik Otorinolaringologii, 1949, No. 5 c. 74-75

SO: Letopis'nykh Statey, Vol. 45, Moskva, 1949

*KANTOROVICH, R. M.*

ZINOV'YEVA, Kh.G.; MITRASOVA, Ye.V.; KANTOROVICH, R.M.; BONDARENKO, M.M.

Preservation of azotobacterin. Mikrobiol.shur. 16 no.2:20-24 '54.  
(MLRA 8:5)

1. Z. Institutu mikrobiologii AN URSS i Kiivs'kogo zavodu bakterial'-  
nykh dobriv.

(AZOTOBACTER)

(FERTILIZERS AND MANURES)

KLIMENKO, G.D. [KLYMENKO, H.D.], KANTOROVICH, R.M. [KANTOROVYCH, R.M.]

Use of azotobacterin in feeding baby pigs. Mikrobiol.shur. 20  
no.2:68-70 '58 (MIRA 11:7)

1. Z Kiiva'kogo zavodu bakterial'nikh preparativ.  
(AZOTOBACTER)  
(SWINE--FEEDING AND FEEDING STUFFS)



KANTOROVICH, S. A. a

(2)

Method of determination of butoxy groups. S. A. a  
 Kantorovich and O. N. Alceina. *Byull. Obshch. Khim.*  
 Leningrad. Prom. 1953, No. 4, 70-4; *Referat. Zhur.*,  
 Khim. 1953, No. 7122.—Butoxy groups in phenol-formalde-  
 hyde resin intermediates (monobutoxymonomethylolphenyl-  
 olpropane, dibutoxydimethyldimethyloldiphenylolpropane,  
 tributoxytrimethylmonomethyloldiphenylolpropane, mono-  
 butoxymonomethyltrimethyloldiphenylolpropane, mono-  
 butoxytetramethylolpropane) were detd. by a  
 mikromethod based on the reaction:  $ROR' + HI =$   
 $R'I + ROH$ ;  $R'I + Br_2 = R'Br + IBr$ ;  $IBr + 2Br_2 +$   
 $3H_2O = HIO_3 + 5HBr$ ;  $HIO_3 + 5KI + 5H^+ = 3I_2 +$   
 $3H_2O + 5K^+$ ,  $I_2 + 2Na_2S_2O_3 = 2NaI + 2Na_2S_4O_6$ . The  
 results agreed well with those obtained by the macro-  
 method.  
 M.H.

KANTOROVICH, V., inzhener; YAVNEL', B., inzhener.

Repair of the TRB-2 temperature control valve. Khel.tekh.33 no.3:  
67-70 J1-S '56. (MIRA 9:10)  
(Refrigeration and refrigerating machinery--Repairing)(Valves)

ACC NR: AP6017128

SOURCE CODE: UR/0410/65/000/002/0069/0076

AUTHOR: Kantorovich, V. B. (Baku); Melik-Shakhnazarov, A. M. (Baku); Shayn, I. L. (Baku)

ORG: none

TITLE: Investigation of the process of equilibration in digital automatic AC compensators [This paper was presented at the 6th All-Union Conference on Automatic Control and Methods of Electrical Measurement held at Novosibirsk in Sept., 1964]

SOURCE: Avtometriya, no. 2, 1965, 69-76

TOPIC TAGS: hodograph; digital system

ABSTRACT: The article presents a graphoanalytic method for investigation of the process of equilibration in digital automatic rectangular-coordinate ac compensators which consists of construction of a hodograph of the difference voltage  $\Delta V$  on the plane of compensating voltages and analysis of the nature of its displacement. A dependence is produced for the allowable degree of interdependence of the equilibration circuits and the compensator parameters. Orig. art. has: 4 figures and 12 formulas. [JPRS]

SUB CODE: 09 / SUM DATE: 15Sep64 / ORIG REF: 005

Card 1/1 BLG

UDC: 621.317.7.083.5

NEDEL'SKIY, Georgiy Vasil'yevich; KANTOROVICH, V.I., spets. red.;  
BAULIN, V.A., red.; ~~MEIRISH, D.W., tekhn.red.~~

[Installation of commercial technical equipment] Montash  
torgovo-tekhnologicheskogo oborudovaniia. Moskva, Gos.izd-vo  
torg.lit-ry, 1960. 247 p. (MIRA 14:3)  
(Retail trade--Equipment and supplies)

GUZMAN, A.A.) KANTOROVICH, V.I.

Performance testing of FAK-0,7, FAK-1,1, and FAK-1,5 refrigerating machinery units. Khol.tekh. 38 no.2:38-40 Mr-Ap '61.

(MIRA 14:3)

1. Nauchno-issledovatel'skiy institut trgovli i obshchestvennogo pitaniya.

(Refrigeration and refrigerating machinery)

KANTOROVICH, Vadim Izrailevich; NIKOLAYEVA, N.G., red.; TSIPERSON,  
A.A., red.; VOLKOVA, V.G., tekhn. red.

[Operational indexes of small refrigerators] Ekspluatatsion-  
nye pokazateli malykh kholodil'nykh mashin. Moskva, Gostorg-  
izdat, 1963. 125 p. (MIRA 16:7)  
(Refrigerators--Testing)

~~KANTOROVICH~~, Vadim Izrailevich; YAVNEL', Boris Konstantinovich;  
NIKOLAYEVA, N.G., red.; MEDRISH, D.M., tekhn.red.

[Systems, assembly and repair of refrigerating plants] Ustroistvo, montazh, ekspluatatsiia i remont kholodil'nykh ustanovok. Izd.2., perer. i dop. Moskva, Gostorgizdat, 1963. 416 p.  
(MIRA 16:12)

(Refrigeration and refrigerating machinery)

KANTOROVICH, V.I., inzh.

Analysis of the failures of small refrigerating machines. Khol.  
tekh. 40 no.3:72-73 My-Je '63.

(Refrigeration and refrigerating machinery)



IL'IN, Ye.V.; MAL'GINA, Yevgeniya Viktorovna; ARSHANSKIY, Yakov  
Naumovich. Prinsipal uchastiye SURENKOV, S.M.; KAPLAN,  
L.G.; LIKHANEVA, N.V., kand. tekhn. nauk, retsenzent;  
RUDOMETKIN, P.I., retsenzent; KANTOROVICH, V.I.,  
retsenzent; KREST'YANINOVA, Ye.M., red.

[Refrigerating machinery and plants] Kholodil'nye mashiny  
i ustanovki. Moskva, Pishchevaia promyshlennost', 1964.  
551 p. (MIRA 18:1)

KINEROVICH, V.I.

Repairing casting defects with epoxy resin base paste. Lit. review.  
no. 7439-40 J1 '64. (MIRA 1814)

KANTOROVICH, V.I. (Khar'kov)

Arachnoid endothelial sarcoma (meningioma) with intra- and extracranial metastases. Arkh. pat. 26 no. 3: 77-80 '63.

(MIRA 18/12)

1. laboratoriya patologicheskoy morfologii (zav. - doktor med.nauk Kh.N.Zil'bershteyn) Ukrainskogo nauchno-issledovatel'skogo psikhonevrologicheskogo instituta (direktor O.R.Stepanenko).

ZENKEVICH, G.S.; KANTOROVICH, V.I.

Aneurysms of the cerebral blood vessels. Arkh. pat. 25 no.11:71-75 '63.  
(MIRA 17:12)

1. Iz laboratorii patomorfologii (rukovoditel' - doktor med. nauk  
Kh.N.Zil'bershteyn) Ukrainskogo nauchno-issledovatel'skogo psikhone-  
vrologicheskogo instituta (dir. O.R.Stepanenko).